

REMARKS

Claims 1-26 were pending in this application when the present Office Action was mailed. In this response, claims 1, 13 and 17 have been amended, and claims 27-30 have been added. Accordingly, claims 1-30 are now pending.

In the Office Action mailed June 28, 2002, claims 1-26 were rejected. More specifically, the status of the application in light of this Office Action is as follows:

(A) Claims 1, 7-9, 13-15, 17, 19 and 22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,872,633 to Holzapfel et al. ("Holzapfel");

(B) Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Holzapfel in view of U.S. Patent No. 5,393,624 to Ushijima ("Ushijima");

(C) Claims 3-6 and 20-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Holzapfel in view of U.S. Patent No. 6,231,743 to Etherington ("Etherington");

(D) Claims 10-12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Holzapfel in view of U.S. Patent No. 5,363,171 to Mack ("Mack");

(E) Claim 16 stands rejected under 35 U.S.C. § 103 as being unpatentable over Holzapfel;

(F) Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Holzapfel in view of U.S. Patent No. 6,238,539 to Joyce et al. ("Joyce"); and

(G) Claims 1-26 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting.

The undersigned attorney wishes to thank the Examiner for engaging in a telephone conference on September 26, 2002. During that telephone conference, the Examiner agreed that a proposed amendment to claim 1 distinguished the claim over the applied references. Accordingly, the foregoing amendments and the following remarks reflect the agreement reached between the Examiner and the undersigned attorney during the September 26 telephone conference.

A. Response to the Section 102 Rejections

Claims 1, 7-9, 13-15, 17, 19 and 22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Holzapfel. Claim 1, as amended and as indicated by the Examiner, overcomes the Section 102 rejection and accordingly, the Section 102 rejection of claim 1 should be withdrawn. For the reasons discussed above and for the additional features of claims 7-9, the Section 102 rejection of claims 7-9 (which depend from claim 1) should also be withdrawn.

Claims 13 and 17 have been amended to be consistent with the agreement reached between the undersigned attorney and the Examiner during the September 26 telephone conference. Accordingly, the Section 102 of these claims should be withdrawn. The Section 102 rejection of claims 14 and 15 (which depend from claim 13) and claims 19 and 22 (which depend from claim 17) should be withdrawn for the reasons discussed above and for the additional features of these claims.

B. Response to the Section 103 Rejection of Claim 2

Claim 2 was rejected under 35 U.S.C. § 103 as being unpatentable over Holzapfel in view of Ushijima. Claim 2 depends from claim 1 and is accordingly patentable over Holzapfel for the reasons discussed above and the additional features of these claims. As agreed to by the Examiner during the September 26 telephone conference, Holzapfel and Ushijima together do not support a *prima facie* case for obviousness under Section 103. Accordingly, the Section 103 rejection of claim 2 should be withdrawn.

C. Response to the Section 103 Rejection of Claims 3-6 and 20-21

Claims 3-6 and 20-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Holzapfel in view of Etherington. Claims 3-6 depend from claim 1 and claims 20-21 depend from claim 17. Accordingly, these claims are patentable over Holzapfel for the reasons discusses above and for the additional features of these claims. As agreed to by the Examiner during the September 26 telephone conference, Holzapfel and Etherington together fail to support a *prima facie* case of obviousness under Section 103. Accordingly, the Section 103 rejection of these claims should be withdrawn.

D. Response to the Section 103 Rejection of Claims 10-12

Claims 10-12 were rejected as being unpatentable over Holzapfel in view of Mack. Claims 10-12 depend from claim 1 and accordingly are patentable over Holzapfel for the reasons discusses above and for the additional features of these claims. Furthermore, Holzapfel and Mack together fail to support a *prima facie* case of obviousness under Section 103. Accordingly, the Section 103 rejection of claims 10-12 should be withdrawn.

E. Response to the Section 103 Rejection of Claim 16

Claim 16 was rejected under 35 U.S.C. § 103 as being unpatentable over Holzapfel. Claim 16 includes, *inter alia*, the features of claim 13. As discussed above, claim 13 is patentable over Holzapfel for the reasons agreed to by the Examiner during the September 26 telephone conference. Accordingly, the Section 103 rejection of claim 16 should be withdrawn.

F. Response to Section 103 Rejection of Claim 18

Claim 18 was rejected under 35 U.S.C. § 103 as being unpatentable over Holzapfel in view of Joyce. Claim 18 depends from claim 17 and is accordingly patentable over Holzapfel for the reasons discussed above and for the additional features of the claim. Holzapfel and Joyce together fail to support a *prima facie* case of

obviousness under Section 103. Accordingly, the Section 103 rejection of claim 18 should be withdrawn.

G. Response to the Double Patenting Rejection

Claims 1-26 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of copending U.S. Patent Application No. 09/612,898. The enclosed terminal disclaimer obviates the provisional double patenting rejection, and accordingly, the double patenting rejection should be withdrawn.

H. New Claims 27-30 Are Patentable Over the Applied References

Claim 27 is directed to an apparatus for processing a microelectronic workpiece, and includes a processing chamber configured to apply a conductive material to the microelectronic workpiece. The apparatus further includes a metrology unit having space for receiving the microelectronic workpiece and being configured to detect the characteristic of a conductive layer of the microelectronic workpiece. A control unit is operatively coupled to the metrology unit to receive a condition signal corresponding to the characteristic of the conductive layer. The control unit is also operatively coupled to the processing chamber to adjust at least one process parameter at the processing chamber based on the condition signal. None of the applied references appear to disclose or suggest the combination of features recited in claim 27. Accordingly, claim 27 should be in condition for allowance. Claims 28-30, which depend from claim 27, should also be in condition for allowance.

I. Conclusion

In light of the foregoing amendments and remarks, all the pending claims are in condition for allowance. Applicants, therefore, request reconsideration of the application and an allowance of all pending claims. If the Examiner wishes to discuss the pending claims and/or the cited references, the Examiner is encouraged to contact John M. Wechkin by telephone. Additionally, if the Examiner notices any informalities

obviousness under Section 103. Accordingly, the Section 103 rejection of claim 18 should be withdrawn.

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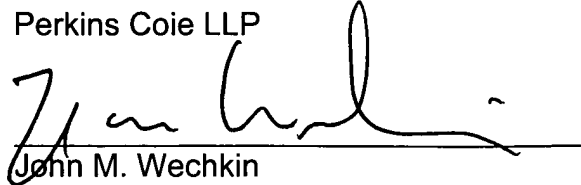
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in the claims, she is also encouraged to contact John M. Wechkin to expediently correct any such informalities.

Respectfully submitted,

Perkins Coie LLP

A handwritten signature in black ink, appearing to read "John M. Wechkin", written over a horizontal line.

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

1. (Amended) A processing apparatus for processing a microelectronic workpiece, comprising:

an in-line metrology unit having a space for receiving a microelectronic workpiece for measuring a condition of a first layer on said microelectronic workpiece and generating a condition signal;

a control, signal-connected to said metrology unit;

a process unit providing a space to receive said microelectronic workpiece and performing a material application process that is controlled by said control;

wherein said condition signal from said metrology unit to said control influences said process; and

a transport unit positioned to receive the microelectronic workpiece from at least one of the process unit and the in-line metrology unit and move the microelectronic workpiece to the other of the process unit and the in-line metrology unit.

13. (Amended) A method of processing a microelectronic workpiece, comprising the steps of:

providing two processing tools each of which further processes a microelectronic workpiece in a preselected process and is configured to apply material to the microelectronic workpiece;

moving the microelectronic workpiece from one of the tools to an in-line metrology unit;

using ~~an~~ the in-line metrology unit, determining a condition of a layer on said microelectronic workpiece ~~at one of the tools;~~ and

in response to a signal from the metrology unit, modifying a process parameter in the respective other tool.

17. (Amended) A processing apparatus for processing a microelectronic workpiece, comprising:

an in-line metrology unit having a space for receiving a microelectronic workpiece and configured to generate condition data in response to a measured condition on said microelectronic workpiece;

a processing unit providing a space to receive a microelectronic workpiece to ~~process a layer on~~ apply material to said microelectronic workpiece;

a control, signal-connected to said metrology unit and to said processing unit to control said process of said microelectronic workpiece depending on said condition data; and

a transport unit positioned to receive the microelectronic workpiece from at least one of the process unit and the in-line metrology unit and move the microelectronic workpiece to the other of the process unit and the in-line metrology unit.